

A new *Diplodactylus*, subgenus *Strophurus* (Lacertilia: Gekkonidae) from northern Australia

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Abstract – A new species of *Diplodactylus*, subgenus *Strophurus* is described from northern Australia.

INTRODUCTION

In 'Lizards of Western Australia part III, geckos and pygopods' (Storr *et al.* 1990: 31) we made special mention of an unusually large, pale *Diplodactylus mcmillani* collected 7 km SE of Mt Septimus [30 km E of Kununurra], Northern Territory. This is 250 km ESE of the nearest collecting site for *D. mcmillani*, which is in the Drysdale River National Park (15°03'S, 126°45'E). Recently, Mr N. Gambold, C.S.I.R.O. Tropical Ecosystems Research Centre, Division of Wildlife and Ecology, Darwin, Northern Territory, collected three specimens of a similar gecko from the Ord River basin. Their scalation is consistent with the pale specimen, but being recently collected they have a well preserved striped pattern which is similar, but different in detail, to other members of the *michaelseni* group, subgenus *Strophurus* (*sensu* Storr *et al.* 1990). These four specimens, all in the Western Australian Museum, are referred here to a new species.

SYSTEMATICS

Diplodactylus robinsoni sp. nov.

Holotype

R108646, ♂ collected by N. Gambold on 21 July 1991 at Mt Parker, Osmond Range, Western Australia, 17°10'S, 128°18'E.

Paratypes

Northern Territory: 7 km SE of Mt Septimus, ♂ (R67690).

Western Australia: Wade Creek, 17°11'S, 128°36'E (R108645), ♀, Mt Parker (R108647), ♂.

Diagnosis

Diplodactylus robinsoni is a large robust member of the *michaelseni* group, subgenus *Strophurus*, distinguishable from *D. taeniata* and *D. mcmillani* (other species in the *michaelseni* group in which the

rostral is precluded from the nostril by a prenasal) by its greater size (*D. robinsoni* 51–55 mm, mean 52.7; *D. mcmillani* 35–52 mm, mean 42.9; *D. taeniata* 32–44 mm, mean 38.6) and its colour pattern which is reduced to a series of simple wavy, web-like brown stripes, that is, it lacks the brown vertebral stripe of *D. taeniata* (Figure 1) and the white dorsolateral stripe of *D. mcmillani*.

Description

Snout-vent length males 51–55 (N3, mean 53), female 55.

Rostral hexagonal 2.0–2.5 times as wide as high (N4, mean 2.2), median groove extending down 30% of scale.

Rostral surrounded by first labial, prenasal (nearly as large as the first labial and broadly excluding rostral from nostril), 2 supraoculars and 3 or 4 (mostly 4) postnasals. Internasals 2 or 3 (mostly 2). Loreals 14–15 (N4, mean 14.5), upper labials 16–17 (N4, mean 16.5), 11–13 to immediately below eye (N4, mean 12.5). Undivided lamellae under fourth toe 5–6 (N4, mean 5.2).

Ventral scales slightly larger than dorsal scales. Males with 3 or 4 (mostly 3) spines on cloacal spur. No preanal pores.

Ground colour (except R67960 which is immaculate creamy-white consistent with lengthy exposure to light) drab brownish-grey, belly slightly paler. Top of head immaculate, temporals and nape sparsely flecked and spotted brown. Each flank with 6–8 brown, irregular, interrupted, spidery lines which are most regular and complete on lower flanks. Mid-dorsally spidery lines reduced to flecks and spots covering 1–5 scales. Limbs with brown flecks, belly with pale brown spots and flecks. No specimen has a original tail.

Distribution

Upper Keep and Middle Ord River drainages in north-west Northern Territory and east Kimberley, Western Australia respectively. See Figure 2.

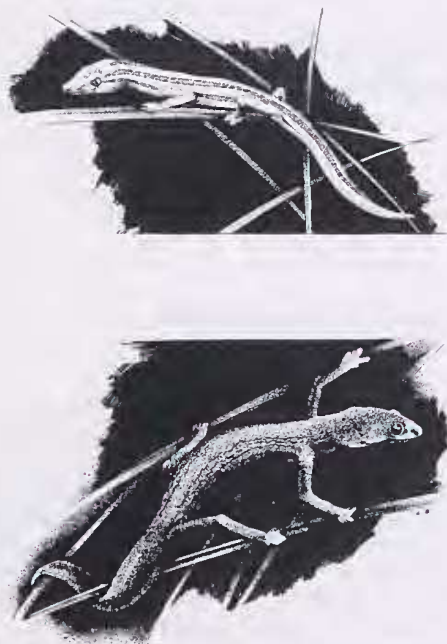


Figure 1 Pattern differences between *Diplodactylus taeniata* (above) and *D. robinsoni*. Drawn from R70405 and R108645 respectively.

Remarks

Three other species in the *Diplodactylus michaelseni* group, subgenus *Strophurus*, occur in the Kimberley region of Western Australia. *Diplodactylus jeanae* is only found in the southern Kimberley (Storr *et al.* 1990) and has the rostral in contact with the nostril. Of the remaining two species, *D. mcmillani* is considered a northwest Kimberley endemic and allopatric with *D. robinsoni*, leaving *D. taeniata* as the only species in the group sympatric with *D. robinsoni*.

Apart from size and pattern *D. taeniata* differs



Figure 2 Distribution of (O) *Diplodactylus mcmillani*, (●) *D. robinsoni* and (Δ) *D. taeniata* in the Kimberley, W.A.

from *D. robinsoni* in having fewer labials, fewer undivided lamellae and fewer cloacal spines (see Table 1). Furthermore, the rostral crease completely divides the rostral in *D. taeniata* but only partially divides the rostral in *D. robinsoni*.

D. robinsoni is most similar in body proportions and details of scalation to *D. mcmillani* and these taxa may be closely related. Apart from the differences in size and patterning noted earlier (see also Figure 1), *D. robinsoni* averages slightly higher numbers of subdigital lamellae and labials to below the eye (see Table 2).

All three Western Australian specimens were taken from *Triodia* on sandstone.

Etymology

This species is named after David Robinson in appreciation of his voluntary assistance to the Department of Herpetology, Western Australian Museum both in the field and in the laboratory.

Table 1 Comparison of size and numbers of cloacal spines, undivided subdigital lamellae and labials in *D. robinsoni*, *D. mcmillani* and *D. taeniata*.

		Size of males (SVL)	Size of females (SVL)	Overall size (SVL)	Cloacal spines (males)	Undivided lamellae	labials (to below eye)
<i>D. robinsoni</i>	N	3	1	4	4	4	4
	Range	51–55	55	51–55	3–4	5–6	11–13
	Mean	53.0		52.7	3.3	5.2	12.5
<i>D. mcmillani</i>	N	18	19	37	18	21	29
	Range	35–49	36–52	35–52	2–4	3–6	9–14
	Mean	41.7	45.9	42.9	3	4	11.2
<i>D. taeniata</i>	N	7	5	12	7	10	12
	Range	32–41	37–44	32–44	2–2	3–4	8–10
	Mean	37.4	40.2	38.6	2.0	3.6	9.0

ACKNOWLEDGEMENT

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REFERENCE

- Storr, G.M., Smith, L.A. and Johnstone, R.E. (1990).
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